EMPOWERing Clean Energy Communities

Project Synopsis

Energy Efficiency Grants

Aquatic Facility Cumberland YMCA **Allegany County** **$25,103**
The grant will be used to replace the current water heaters with new high efficiency ones and purchase pool blankets to cover the pools when not in use. This will limit energy usage, water evaporation, and decrease natural gas and pool chemical usage. Not only will this lead to a greener facility but it will also make greater funding available to provide services throughout the YMCA to the low and moderate income communities that it serves in Western Maryland. Expected annual energy savings are nearly 132,000 kWh, with significant water savings as well.

City of Annapolis Municipal Buildings **Anne Arundel County** **$75,000**
The City proposes to do several upgrades to 4 buildings, including lighting, boilers and controls, windows replacement, and improvements recommended from a building energy audit. Total energy saved is estimated to be 615,503 kWh.

National Aquarium in Baltimore **Baltimore City** **$100,000**
The Aquarium will install five Variable Frequency Drive (VFD) devices to more economically control the flow of water to the exhibits and associated filtration equipment. VFD's to be replaced are in the main pump rooms of buildings on Piers 3 and 4; they will operate five horizontal and/or vertical pumps. By installing VFD's, they can regulate water flow by changing the motor speed rather than constantly running the motors at full load. This will have a direct impact on the amount of energy used to pump water through exhibits. Estimated energy savings from replacing all the five drives exceeds 425,000 kWh each year.

SPCA of Baltimore City **Baltimore City** **$7,000**
The current animal shelter was built in 1973. Funds will be used to update the light fixtures with more energy efficient units. The estimated energy savings are expected to be over 13,000 kWh per year.

American Visionary Art Museum **Baltimore City** **$40,000**
Funds will replace a HVAC water chiller and properly seal the roofing connection to preserve interior conditions. The new high-efficiency HVAC chiller will be integrated into the Museum's existing building automation. Existing and newly installed chilled water pipes will be insulated. All connections through the roof membrane will be sealed properly to industry standards. Energy efficiency improvements, plus extra work funded by a zero-interest loan, will contribute to energy savings amount to 78,000 kWh each year.

Baltimore Hebrew Congregation **Baltimore County** **$1,000**
57 exit signs that burn 24 hours per day in the building using two 20 watt incandescent bulbs each will be replaced with LED screw-in bulbs that use 1 watt each. Annual energy savings are expected to exceed 31,000 kWh each year.

Islamic Society of Baltimore **Baltimore County** **$85,647**
The Society will replace various components of the electrical and Heating Ventilating and Air Conditioning (HVAC) system with new high standard and high efficiency equipment: new metal halide light fixtures will be equipped with pulse-start lamps and compatible dimming high efficiency electronic ballasts; new fluorescent lighting fixtures will be equipped with 32-Watt T-8 lamps and high efficiency electronic ballasts; new HVAC equipment will have higher efficiency and will be provided with energy saving motors. Estimated annual savings in electricity consumption exceeds 78,550 kWh.

Caroline County Humane Society **$23,250**
This project will replace the current standard hot water heaters with more efficient tankless hot water heaters. It will also change the primary source of power for heating the water from propane gas to solar collectors. Hot water is a large expense for the Caroline County Humane Society, Inc. It is used to clean and sterilize food bowls, hand washing, as well as cleaning and sterilizing 20+ dog kennels. Expected annual energy savings amount to over 138,000 kWh. (This is an addition to the amount awarded under the renewable energy projects.)

Town of Charlestown **Cecil County** **$10,000**
A Town building that was formerly a school is being used exclusively by the local Boys and Girls Club chapter. The old inefficient heating and cooling units are being replaced with new and efficient ones. Expected energy savings amount to the equivalent of 8,200 kWh each year.

Frederick County Public Schools Lighting Retrofits **$40,000**
Frederick County Public Schools (FCPS) proposes to replace current metal halide lighting in five facilities. By replacing a minimum of 136 metal halide light fixtures with T-5 high bay fluorescent lighting, FCPS anticipates realizing a reduction in energy consumption of approximately 130,000 kWh/year.

Frederick County Government **$80,000**
Grant funds will be used to implement energy efficiency upgrades and renovation projects identified in seven completed building assessments. In addition, funding will provide for the coordination and development of building assessments on four additional buildings. Estimated energy savings amount to almost 320,000 kWh per year.

City of Aberdeen **Harford County** **$15,000**
The City of Aberdeen is investigating the possibility of generating electricity from an anaerobic digester at the Advanced Aberdeen Waste Water Treatment Plant. This grant will fund a feasibility study of an anaerobic digestion project and establish the potential for energy production.

Kent County Government **Kent County** **$15,000**
The Kent County Government will utilize the grant funds to conduct an energy audit of the Tolchester Wastewater Treatment Plant facility. This audit will identify, prioritize, and estimate the costs associated with equipment upgrades, HVAC improvements, architectural changes, and process changes that will reduce the energy usage at the WWTP.

Montgomery County Department of Environmental Protection **$70,000**
The Department of Environmental Protection (DEP) in partnership with local community groups plans reduce energy consumption and decrease human impacts on our environment using a

multi-pronged approach for serving 300 homes by: professionally installing and teaching residents how to use programmable thermostats; providing an incentive for installers to recycle mercury in reclaimed mechanical thermostats; evaluating the effectiveness of energy education in populations receiving programmable thermostats and those that do not; and conducting "house meetings", which provide unique opportunities for participants to experience energy efficiency improvements, and encourage attendees to put themselves on a low-carbon diet. Estimated annual energy savings exceed 350,000 kWh per year.

Maryland National Capital Park and Planning Commission: Montgomery County $73,000
This grant will provide funding to upgrade the lighting systems at two ice rinks in Montgomery County, where they run thousands of quality programs to meet community needs for active and passive recreation, including ice skating. As the nation's only five-time gold-medalist park system, their Resource Conservation and Green Parks Management program is a prime candidate to promote MEA's EmPOWER program, showcasing energy savings in large public facilities. The annual estimated reduction in electricity use from the two rinks is approximately 250,000 kWh.

Casa de Maryland Prince George's County $180,000
CASA will renovate the McCormick-Goodhart Home in Langley Park in order to create a Multicultural Center to serve the area's low-income, primarily immigrant, community members. The building is three-story Georgian Revival brick and concrete home built in 1924. The building is now the centerpiece of a 24-acre garden apartment complex of 587 units. The renovation incorporates plans and budget requirements for LEED certification at the gold level. CASA anticipates that this project will be a national model for incorporating both historic and green principles into a renovation project. Plans that support this reduction in energy consumption include an eye-level green roof on the basement addition, green roofs on the two side porches, controllable lighting and heating systems, water-efficient landscaping, and a geothermal HVAC system. Annual energy savings over a to-code building are expected to be over 138,000 kWh.

Town of Landover Hills Prince George's County $50,000
Funds will be used to replace a 20 year-old heating and cooling unit in Town Hall with two new efficient ones. The old system did not zone the heating and cooling, so some parts of the building need heating while other parts require cooling. New controls and ductwork will increase the efficiency and comfort. 49,000 kWh are expected to be saved each year.

Queen Anne's County Government Queen Anne's County $15,000
The Queen Anne's County Government will utilize the grant funds to conduct an energy audit of their Public Works Facility to identify and evaluate potential for energy efficiency improvements. Upon evaluation, the County will implement energy efficiency improvements that will reduce energy consumption and provide significant energy cost savings to the Public Works Facility.

City of Salisbury Wicomico County $80,000
The City staff has identified the following projects that will reduce energy use and costs: conversion of T-12 to T-8 lighting fixtures; conversion high intensity discharge & sodium vapor fixtures to T-8 lighting fixtures; time clocks and occupancy sensors to control exterior and interior lights; programmable thermostats; and HVAC equipment replacement. Annual estimated energy savings exceed 295,000 kWh each year.

Washington County **$15,000**

These funds will allow Washington County Government to perform energy audits, develop energy conservation plans, create greenhouse gas inventories, or other activities improving the energy efficiency of its jurisdiction.

Low – Moderate Income Grants

Catholic Charities Anne Arundel, Baltimore County and City, and Harford $351,297
Associated Catholic Charities (Catholic Charities) Maryland Energy Conservation (MEC) and C&O Conservation, Inc. (C&O) are partnering to train new weatherization employees and improve the energy efficiency of housing for vulnerable populations. Utilizing funds sought under this grant; Catholic Charities, MEC and C&O propose to train and fully equip nine (9) weatherization techs and a Crew Chief, and weatherize 650 residential units. The proposed weatherization services will benefit low -income seniors, disabled adults and people experiencing homelessness. Estimated annual energy savings are the equivalent of over 1,454,000 kWh.

Fuel Fund of Maryland Statewide $149,250
Funding will provide for a statewide energy conservation-training program for individuals (adults and children), families, and groups (elementary schools, workforce training workshops for adults, etc.). WATT WATCHERS OF MARYLAND utilizes a train-the-trainer approach to maximize information sharing while integrating the concepts at the local level through local volunteer-trainers. The existing prototype has been functioning for about 15 months.

The program includes: point of intake at OHEP and FFM offices; education on the techniques of home-based conservation; WATT WATCHERS OF MARYLAND toolkits including insulation/weatherization stripping, water-miser shower heads, compact fluorescent light bulbs, etc; for adults, 5 workshop sessions sharing practicalities of saving energy and money, interpreting your energy bills, effectively utilizing the WATT WATCHERS OF MARYLAND toolkit, etc.; for children, coloring books, fun-hints on conservation that they can do to evaluate their home and behaviors for wasted energy; for the general public, energy saving hints on the website, referrals and links to other sites for in-depth information on how to save energy, opportunities for classes for community associations, public service announcements on energy saving and the value of reducing consumption. Expected annual energy savings from WATT WATCHERS toolkits amount to over 4,100,000 kWh.

Habitat for Humanity – Maryland Statewide $700,000
Between May 2009 and July 2010, 12 Habitat for Humanity Affiliates in Maryland will construct or rehabilitate 117 homes in partnership with families, thousands of volunteers, and almost $ 20 million dollars in donated funds, materials, and services. Their GreenerHeat 2010 initiative will reduce energy consumption across the state by providing technical assistance for helping each home reach an ENERGY STAR rating of 85 or below. Estimated annual energy savings amount to over 438,000 kWh.

City of Annapolis EZ $100,000
Annapolis EZ will use the grant to provide loans for energy efficiency upgrades to 10 low-to-moderate income homes, one full time position, and other administrative costs. Annapolis EZ is an innovative approach to incorporating energy efficiency into homes and businesses. It offers reduced costs for home and business energy audits, low interest loans for energy improvements attached to the property, as well as help navigate the technical and financial assistance available for such activities. Energy savings from the ten homes is estimated to be 26,952 kWh annually.

Civic Works, Inc. **Baltimore City** **$350,000**

Project Lightbulb makes energy conservation visits to households located in low-to-moderate income communities, providing homeowners with information about reducing energy use and installing CFLs, faucet aerators and showerheads, smoke/carbon monoxide detectors, water heater wraps and pipe insulation. The program trains teams of AmeriCorps members, who serve approximately three months with Project Lightbulb and receive a modest stipend, job development training, and an education award of $1,000 that can be used at most colleges and trade schools. The project will serve 675 low-to-moderate income homes.

Civic Works' 3E Energy Solutions utilizes the principles of building science, retrofitting existing residential buildings to create living spaces that are more energy efficient, more affordable, safer, and more comfortable. The program provides training and apprenticeship opportunities for underemployed Baltimore residents hired to join the 3E Energy Solutions team. The 3E Energy Solutions program is currently funded to provide air sealing services for 35 households. Funding from MEA will allow the program to serve additional households while expanding weatherization services to include blown cellulose insulation.

Combined estimated annual energy savings are 477,000 kWh.

Coalition to End Childhood Lead Poisoning **Baltimore City** **$100,000**

Energy Plus will serve 60 homes in the coming year by providing compact florescent light bulbs, a water heater blanket, pipe insulation, and weather stripping outside doors. In addition, participants will undergo a behavioral training component to teach energy efficiency and reduction of energy usage. Energy Plus will be provided as an additional benefit to very-low and low income housing units already participating in existing Coalition programs that provide window replacement and other home-based environmental health interventions to reduce lead poisoning, asthma attacks, and household injuries. The Coalition will measure energy consumption reductions by comparing utility costs, kWh of electricity, and therms of natural gas in prior years for each client enrolled in the program. The Coalition will ensure that clients participating in the program agree to share their utility bills to allow the program to evaluate changes in energy consumption. The Coalition will also develop an assessment tool to evaluate pre and post intervention behavioral changes by residents following the intervention and the resident education sessions. Estimated energy savings are over 66,000 kWh per year.

Rebuilding Together – Baltimore **Baltimore City** **$55,500**

Rebuilding Together Baltimore (formerly known as "Christmas in April") is a non-profit organization focused on provided free home repairs for low-income homeowners. This grant will fund a pilot project to provide energy efficiency assessments and repairs and improvements for a total of 20 homes, as well as installing cool roofs on 6 homes. Estimated annual energy savings will exceed 80,000 kWh.

St. Ambrose Housing Center **Baltimore City** **$75,000**

The grant funds will be used to help complete an HVAC replacement and upgrade of 28 affordable rental units at the St. Martins Apartment complex in Baltimore, Maryland. The apartments are occupied by disabled individuals, senior citizens, and low to moderate income working families. Almost 60,000 kWh are expected to be saved each year.

Baltimore County Residential Energy Efficiency **$400,000**

Will retrofit 45 to 50 dwelling units occupied by low to moderate-income homeowners to increase energy efficiency using established standards and techniques such as Home Performance, Energy Star and US Green Building Council's Regreen standards. All properties must undergo an Energy Audit performed by a qualified Energy Auditor that has been certified through such programs as the Building Performance Institute or Home Performance with Energy Star. We are proposing to retrofit single family detached and attached owner occupied housing. This initiative will help us to develop best practice standards in energy efficiency in many types of residential housing stock. Energy savings estimated to be over 180,000 kWh per year.

Jewish Community Services **Baltimore County** **$10,000**
Jewish Community Services will provide upgrades to its furnace, hot water heater, air conditioning, and appliances, including refrigerator and dishwasher, in one of its alternative living units, serving 30low income seniors. Annual energy savings are expected to exceed 12,000 kWh.

Episcopal Housing Corporation **Carroll County** **$111,375**
The Union Street Homeownership project will provide homeownership opportunities for nine low/moderate income families in the City of Westminster. The nine highly efficient town homes will be built utilizing modular construction and meet Energy Star guidelines. Modular construction increases energy efficiency through a well insulated and tight building envelope with no air gaps, which are common in stick built homes. An Energy Star rater will inspect the homes both in the factory and on site to ensure the guidelines are met and certify the houses as Energy Star compliant. An estimated 50,000 kWh will be saved each year.

Frederick County DHCD **$200,000**
Frederick County DHCD will replace all existing 28 heat pumps and 28 hot water heaters with Energy Star units at Bell Court Apartments, a county-owned rental project that serves exclusively low-income senior (62 or older) and disabled residents. Bell Court is owned and operated by Frederick County Government and was developed in partnership with Interfaith Housing Alliance, Inc. via the State Partnership Rental Housing Program. To complement this grant effort, FCDH is concurrently working with the City of Frederick Community Action Agency to utilize the Weatherization Assistance Program (WAP) to fund other energy saving enhancements at Bell Court such as weather-stripping, additional insulation, and re-venting. Annual energy savings are expected to be as much as 104,000 kWh.

Garrett County Community Action Committee **$100,000**
Garrett County CAC is focused on increasing the number of homes it weatherizes each year, from 60 this past year to 300 next year. The need for their services continues to rise. They will use these funds to weatherize an additional 15 homes. The estimated annual energy savings from the 15 homes exceeds 42,000 kWh.

Community Action Council of Howard County **$300,000**
This grant will fund installation of Energy Star furnace, central AC, hot water heater, and related improvements to upgrade fifty residential units during their vacancy periods. Our partners from Department of Housing have agreed to provide supplemental Weatherization funds. Columbia Housing Corporation (CHC) will provide $150,000 in-kind for upgrading the electrical and air support systems. The water heater and furnace are located in a closet in a living room and do not have enough combustion air. The project expects to save over 480,000 kWh each year.

Montgomery County Housing Opportunities Commission $250,000
This project is designed to reduce energy consumption for 44 moderate income families living in homes owned by the Housing Opportunities Commission of Montgomery County (HOC). This grant will fund the replacement of existing, inefficient HVAC systems and water heaters with high efficiency ENERGY STAR (16 SEER) units, based upon the recommendations identified in Maryland Home Performance Energy Audits for each proposed dwelling unit. Expected annual energy savings amount to 189,000 kWh.

Hebrew Home of Greater Washington Montgomery County $97,578
This grant will provide funding for upgrades to 2 facilities serving low-to-moderate income seniors. Upgrades at the Revitz House and the Wasserman residences will replace lighting, thermostats, and controls and compressor lubricants for heating and cooling equipment. Estimated annual energy savings amount to over 740,000 kWh.

City of Mt. Rainier Manor House Prince George's County $100,000
115 low-to-moderate income senior citizens live in a 104-unit facility owned and operated by the City of Mt. Rainier. Each unit is individually metered and utilities are paid by the tenants. There has been significant settling of the building, making the alignment of the doors and windows problematic. Funds will be used to replace, caulk and weatherstrip the doors and windows in 25 of the units. Annual energy savings are expected to exceed 35,000 kWh.

Habitat for Humanity – Talbot & Dorchester Counties $50,000
Habitat for Humanity of Talbot & Dorchester Counties (HFHT&DC) has committed to build homes which will have greater energy efficiency. Additionally it has been agreed that during FY10 we will increase our homebuilding by 25% and do so using sustainable construction practices. The grant will be used to cover the cost of hiring a LEED certified Construction Manager who will immediately supervise the construction of 7 new homes. Changes made to our Habitat for Humanity house plans, design requirements and construction skills will carry forward as they continue to serve the low income housing demand in the years to come. Energy savings from the 7 new homes are expected to exceed 24,000 kWh per year.

Renewable Energy Grants

Bay Ridge Civic Association: Anne Arundel County $20,000
Request is for funding for a strategy plan to produce a solar /wind community energy park under Maryland's current law of 'Special community Benefit District'.

City of Annapolis: Anne Arundel County $20,000
The City of Annapolis is preparing to create a renewable energy park that includes a variety of renewable energy systems. The park will host a Business Continuity Tech Park (BCTP) that will provide a variety of electromagnetic pulse (EMP) hardened-communications, computing and other mission critical facilities so a large geomagnetic storm would not damage mission critical capabilities including renewable energy generation. This park will ultimately provide back-up linkages to a rurally located BCTP at Frostburg State University providing EMP hardened fiber optic networking, data centers, offices and emergency housing. Requested funding for two 900 kWh solar panels.

Town of Chesapeake Beach: Calvert County $38,000
This project undertakes to design and implement a model “Town owned and operated” grid-tied community-based renewable energy generation project. The Project is to deploy as much renewable energy generating capacity as possible, using a portfolio of cost efficient technologies, using the Grid as back-up for time of day and overall peak generation needs as necessary. The Town would use its bonding authority to reduce financing costs and local labor to create jobs and job-training opportunities.

Caroline County Humane Society: $3,000
This project will replace the current standard hot water heaters with more efficient tankless hot water heaters. Will change the primary source of power for heating the water from propane gas to solar collectors. Hot water is a large expense. It is used to clean and sterilize food bowls, hand washing, as well as cleaning and sterilizing 20+ dog kennels. (This is an addition to the amount awarded under the energy efficiency projects.)

Bishop Claggett Center: Frederick County $18,000
The request is for solar hot water system to reduce costs for heating hot water associated with providing 45,000 meals annually. There is an educational component as well with the monitoring system, year-round cost-savings and system output can be tracked daily.

City of Brunswick - solar: Frederick County $10,000
The City of Brunswick believes that solar panels placed on City owned property could create enough power to significantly offset the power needed to operate one City facility. The City of Brunswick seeks grant assistance to place solar panels on a City property to power a municipal facility. This project would be the first renewable energy project for the City of Brunswick.

City of Brunswick - wind: Frederick County $12,000
The City of Brunswick seeks grant assistance to place a wind turbine on municipal land.
The renewable energy source combined with energy reduction will reduce the fossil energy consumption. The proposed project would allow for 600 kWh per month to be generated from wind power.

Maryland Salem Children's Trust: Garrett County $6,000
Install a 45' wind turbine as the second phase of a renewable energy (solar/wind) project. This phase involves the installation of a wind turbine behind the school building. The wind turbine will generate 400 kWh per month at 12 mph. Students recently received anemometer readings from FSU to evaluate the wind capability of our location. The first phase began two years ago with the students working with Frostburg State University to evaluate the solar potential of our building.

Doolittle Farm and Friends of Frederick County: Montgomery County $14,800
Friends of Frederick County is partnering with Doolittle Farm in Poolesville, a model family farm, in support of their WIND FARMETTE™ project. Operations include raising beef cattle and organic gardening on a 5-acre plat. They intend to install wind turbines to; net meter to offset rising cost of electricity, use cleaner energy sources, operating in a hi-visibility rural area, offer small-wind programs for small-farmers and community members, and continue to host programs for groups and clubs such as 4-H, Scouts and autistic children. The turbine model is rated to produce 1,800 kWh annually and the three turbines in the Farmette project are expected to generate a total of 6 REC's per average year.

Holy Redeemer School: Prince Georges County $5,000
Holy Redeemer School proposes to take an exciting first step into renewable energy by installing 12 solar panels on 200 sq.ft. of the School's large, flat roof. The 2KW system is expected to produce 265 KWH per month or 3.2MWH per year, which is 3% of the electrical needs of the School. Generating renewable energy will provide a great example to our students, and will provide many teachable moments for our science teachers to extend the lessons they are already teaching about energy consumption and renewable energy.

Somerset County Economic Development $37,500
This will further the county's project which will create green jobs in a sustainable and innovative biomass/ethanol project. The project will enhance the agricultural economy of the region.

Town of Ocean City: Worcester County $6,000
Grant funds will be used to conduct a feasibility study and prepare procurement documents for installation of renewable on site electric generation at municipal facilities. The study will evaluate the applicability, installation costs, and estimated revenues to determine the economic payback for installation of wind turbines, solar or other on site renewable generation.

Project Synopsis

Energy Efficiency Loans

City of Annapolis **Anne Arundel County** **$40,000**
The City will be installing a geothermal heat pump to heat and cool an old power house that was part of a small hydroelectric generating unit. The building will be used to house the demonstration information for the City's Renewable Energy Park. The heat pump will save an estimated 20,000 kWh per year over the next most efficient system.

American Visionary Art Museum **Baltimore City** **$60,000**
Funds will replace a HVAC water chiller and properly seal the roofing connection to preserve interior conditions. High-efficiency, multi-stage rotary scroll and screw compressors offer scalability with full load EER ratios up to 10.6 and integrated part load values as high as 15.2. Other features and improvements that will increase building and operational efficiency include: insulated chilled water pipes; freeze protection; single point power connection; and tight seals between roof membrane and roof superstructure. Estimated energy savings amount to 78,000 each year (kWh savings counted through grant).

City of Westminster **Carroll County** **$76,000**
The City will perform an energy audit and implement the findings for 6 municipal buildings; four are owned and occupied by City offices, one is owned by the City and leased to the non-profit Carroll County Arts Council, and the other is owned by the City and leased to non-profit Family and Children's Services of Central Maryland. Annual energy savings are expected to 870,000 kWh.

CASA de Maryland **Prince George's County** **$170,000**
CASA will renovate the McCormick-Goodhart Home in Langley Park in order to create a Multicultural Center to serve the area's low-income, primarily immigrant, community members. The building is three-story Georgian Revival brick and concrete home built in 1924. The building is now the centerpiece of a 24-acre garden apartment complex of 587 units. The renovation incorporates plans and budget requirements for LEED certification at the gold level. CASA anticipates that this project will be a national model for incorporating both historic and green principles into a renovation project. Plans that support this reduction in energy consumption include an eye-level green roof on the basement addition, green roofs on the two side porches, controllable lighting and heating systems, use of low-emitting materials, water-efficient landscaping, and a geothermal HVAC system. Annual energy savings over a to-code building are expected to be over 138,000 kWh (kWh savings counted through grant).

City of Hyattsville **Prince George's County** **$50,000**
The City will convert its City Administration building from electricity to natural gas for heating and cooling, water heating, and some appliances, thereby saving over 280,000 kWh each year.

City of Mount Rainier **Prince George's County** **$100,000**
The City will implement energy efficiency improvements to City Hall, including replacing windows, weatherizing doors and windows, using compact fluorescent light bulbs, install a solar water heating system, and water saving plumbing features. Expected energy savings will amount to over 38,000 kWh annually.

Holy Redeemer School **Prince George's County** **$13,158**
The school is doing a major lighting retrofit that is expected to save over 18,000 kWh each year. In order to reduce electrical energy consumption, Holy Redeemer School proposes to convert to energy efficient lighting and install occupancy sensors so lights turn off automatically when they are unoccupied. The School currently uses a variety of fluorescent and incandescent bulbs for lighting. The ballasts are outdated magnetic-type, and there are no occupancy sensors. The project entails retrofitting these bulbs with more energy efficient tubes such as T-8, replacing magnetic ballasts with electronic ballasts, and installing occupancy sensors.

Town of Landover Hills **Prince George's County** **$20,000**
Funds will be used to replace a 20 year-old heating and cooling unit in Town Hall with two new efficient ones. The old system did not zone the heating and cooling, so some parts of the building need heating while other parts require cooling. New controls and ductwork will increase the efficiency and comfort. 49,000 kWh are expected to be saved each year (kWh savings counted through grant).

Somerset County Government **$300,000**
The Somerset County Office Complex is a 1950's renovated school converted into office space for various county agencies. The majority of the office heat is provided by two 30-year old oil-fired steam boilers, using cat iron radiators. Approximately 80% of the offices are cooled by window units. The remaining space is heated and cooled by heat pumps. The loan will go towards installation of new high efficient boilers and a central air conditioner. Annual energy savings are expected to exceed the equivalent of 820,000 kWh.

City of Salisbury **Wicomico County** **$300,000**
City will replace all of its traffic lights to highly efficient and long-lasting LED lights. The Empower Grant would provide the funds needed to replace the 228 existing traffic light bulbs and, if required, traffic fixtures to LED technology. The estimated annual savings will be an additional 2%, not including the reduced annual cost for bulb replacement and repair. Expected annual energy savings amount to almost 350,000 kWh each year.

Low-to-Moderate Income Loans

Baltimore Medical Systems **Baltimore City** **$906,768**

A new 130,000 square foot building designed to achieve LEED Platinum status, with geothermal heat pump, green roof, highly efficient lighting, building envelope measures, variable air volume HVAC systems with energy recovery, controls, and day lighting is being built in Highlandtown. It will serve mostly uninsured individuals. The facility expects to save over 510,000 kWh annually over a standard design building.

Housing Authority of Cambridge **Dorchester County** **$593,232**

The City will be replacing gas furnaces and water heaters, in eight affordable housing buildings serving 190 units and 470 residents, with high efficiency combination units. This is part of a larger Energy Performance Contract which will address other aspects of the units, such as lighting, building envelope measures, water saving devices, and appliances. Annual energy savings are expected to exceed 1,100,000 kWh per year.